

Title (en)

RAMAN AMPLIFIER, OPTICAL REPEATER, AND RAMAN AMPLIFICATION METHOD

Title (de)

RAMAN VERSTÄRKER, OPTISCHER ZWISCHENVERSTÄRKER UND VERFAHREN ZUR RAMANVERSTÄRKUNG

Title (fr)

AMPLIFICATEUR RAMAN, REPETEUR OPTIQUE ET PROCEDE D'AMPLIFICATION RAMAN

Publication

EP 1018666 A4 20040901 (EN)

Application

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Abstract (en)

[origin: EP1018666A1] A Raman amplifier comprises a pumping light producing means (1) for producing pumping lights. The pumping lights are multiplexed with a signal light propagated through an optical fiber (2) so as to give the signal light a Raman gain. The means (1) is constituted of a semiconductor laser of Fabri-Perot, DFB, or DBR type and an MOPA (3). The center wavelengths of the pumping lights are different from each other, and the intervals between them are 6 nm to 35 nm. An optical repeater provided in an optical fiber transmission line (8) compensates the loss caused by the optical fiber transmission line (8) and includes the Raman amplifier (9) used for the compensation. A Raman amplification method for Raman-amplifying a signal light by sending the signal light and pumping lights having mutually different center wavelengths through an optical fiber serving as a Raman-amplification medium, in which the power of the pumping light having a shorter wavelength is higher. <IMAGE>

IPC 1-7

G02F 1/35; **H04B 10/17**; **H01S 3/30**

IPC 8 full level

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Citation (search report)

- No further relevant documents disclosed
- See references of WO 0005622A1

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